

Amendments to the Claims:

Claims 1-20 (Cancelled).

21. (New) A tapered roller bearing comprising:
an outer ring having a conical raceway;
an inner ring having a conical raceway and having a large rib surface on a large diameter side of said conical raceway;
a plurality of tapered rollers rollably arranged between said raceway of said outer ring and said raceway of said inner ring; and
a retainer for keeping said tapered rollers circumferentially spaced apart a predetermined distance from each other;
said large rib surface of said inner ring having:
a conical surface for contacting large end faces of said tapered rollers; and
a flank smoothly connected to said conical surface and curving away from said large end faces of said tapered rollers;
said large rib surface being shaped such that a boundary between said conical surface and said flank is located at an outer edge of a maximum contact oval formed by the contact between said large end faces of said tapered rollers and said conical surface of said large rib surface under a maximum permissible axial load of said tapered roller bearing, and such that a wedge-shaped space is defined between said flank and said large end faces of said tapered rollers for smoothly drawing lubricating oil between said conical surface and said large end faces of said tapered rollers.

22. (New) The tapered roller bearing of claim 21, wherein said flank has a circular section.

23. (New) The tapered roller bearing of claim 22, wherein each of said large end faces of said tapered rollers has a circular recess at a central portion thereof, and an outer periphery of said recess extends to said boundary between said conical surface and said flank of said large rib surface.

24. (New) The tapered roller bearing of claim 21, wherein each of said large end faces of said tapered rollers has a circular recess at a central portion thereof, and an outer periphery of said recess extends to said boundary between said conical surface and said flank of said large rib surface.

25. (New) The tapered roller bearing of claim 21, wherein said inner ring further has a chamfer at an inner peripheral side of said large rib surface and has a recess at an outer peripheral side of said large rib surface.

26. (New) A gear shaft support device for supporting a gear shaft in a vehicle, comprising:
a housing comprising gear oil sealed therein;
tapered roller bearings in said housing for rotatably supporting the gear shaft, each of said tapered roller bearings including:

an outer ring; an inner ring having a large rib surface; and

a plurality of tapered rollers;

said large rib surface of said inner ring having:

a conical surface for contacting large end faces of said tapered rollers; and

a flank smoothly connected to said conical surface and curving away from said large end faces of said tapered rollers;

said large rib surface being shaped such that a boundary between said conical surface and said flank is located at an outer edge of a maximum contact oval formed by the contact between said large end faces of said tapered rollers and said conical surface of said large rib surface under a maximum permissible axial load of each of said tapered roller bearings, and such that a wedge-shaped space is defined between said flank and said large end faces of said tapered rollers for smoothly drawing lubricating oil between said conical surface and said large end faces of said tapered rollers.

27. (New) The tapered roller bearing of claim 26, wherein said flank of said inner ring of each of said tapered roller bearings has a circular section.

28. (New) The tapered roller bearing of claim 27, wherein each of said large end faces of said tapered rollers has a circular recess at a central portion thereof, and an outer periphery of said recess extends to said boundary between said conical surface and said flank of said large rib surface.

29. (New) The tapered roller bearing of claim 26, wherein each of said large end faces of said tapered rollers has a circular recess at a central portion thereof, and an outer periphery of said recess extends to said boundary between said conical surface and said flank of said large rib surface.

30. (New) The tapered roller bearing of claim 26, wherein said inner ring of each of said tapered roller bearings further has a chamfer at an inner peripheral side of said large rib surface and has a recess at an outer peripheral side of said large rib surface.